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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/536,894 | 05/27/2005 | Jang-Won Park | 4720-0111PUS1 | 4675 |

2292 7590 09/14/2006

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| EXAMINER |
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KUHNS, ALLAN R

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| ART UNIT | PAPER NUMBER |
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1732

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/536,894

Applicant(s)

PARK, JANG-WON

Examiner

Allan Kuhns

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1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-62 is/are pending in the application.
4a) Of the above claim(s) 56-62 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 28-55 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

1. Applicant's election with traverse of Group I, claims 28-55 on August 18, 2006 is noted by the examiner. This election is being treated as occurring without traverse since no reason was given for the traverse. Claims 56-62 are withdrawn from consideration.

2. The foreign references appearing on the IDS submitted May 27, 2005 are missing from the file. Please submit copies of these references in the response to this Office action.

3. Claims 28-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 28 is confusing because it apparently requires the presence of only "at least one foaming material", but then the interfacing pattern on that foaming material "prevents chemical and physical interaction between the foaming materials (plural)". Claims 30 and 31 are confusing because the wording appears to indicate that if an EVA -based film is selected, then this film could not have the physical characteristics of the other material recited in that claim. Markush groups must be recited as "selected from the group consisting of" rather than "selected from a group consisting of". Claims 32 and 33 are confusing because the members of the group do not appear to be mutually exclusive since both (EVA)-based resin and a copolymer of resins are recited. Claims 35 and 38 are indefinite because one of ordinary skill in the art would be unable to determine their metes and bounds since it is unclear what modifications are intended. In addition, it is unclear what other attachment is intended

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in claim 35 other than the cloth attachment, and it is unclear what constitutes "normal pressure" in claim 38. Clarification is required.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 28, 30-35, 37 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang (6,192,966). Yang discloses the claimed foaming method including (1) preparing at least one foaming material for a cross-linked foaming, the foaming material processed to have a plane or three dimensional shape (note plastic board 10 described at column 3, lines 36-37), (2) forming at least one interfacing pattern on a surface of at least one of the foaming material (note surface layer 20 or bottom layer 30, described at column 3, lines 37-39, which may be a plastic sheet, and (3) forming a cross-linked foam (column 3, line 43) by foaming the foaming material (note the second expansion described at column 4, line 1) having the interfacing pattern thereon; the cross-linked foam having a foam body and an internally formed surface. It is submitted that plastic sheet 20 or 30 inherently serves to prevent chemical and physical interaction between the at least one foaming material and any other foaming material.

Yang teaches the use of a EVA-based film or sheet, as in claims 30-33, and Yang teaches a sheet or film type covering or interfacing material, as in claim 34. Yang teaches an attachment of the cover film or sheet, as in claim 35. Claim 37 does not

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actually require two or more patterns, due to the use of "if", and it is submitted that the cross-linking, as in claim 38, occurs at some pressure.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Kuhns whose telephone number is (571) 272-1202. The examiner can normally be reached on Monday to Thursday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allan R. Kuhns

ALLAN R. KUHNS
PRIMARY EXAMINER AU 1732

9-12-06